

ABSTRACT

In order to rotate and move an arm of a slave which supports a needle-holder, the rotation and movement of a pen-shaped operating section (31) caused by the fingers of the operator's hand are directly transmitted as the rotation and movement of the needle-holder, as sensors for detecting the rotation and movement of the operating section, an X-axis torque sensor, Y-axis torque sensor, Z-axis torque sensor, and a rotation detecting potentiometer (33) are installed thereon. As a result, the rotation and movement of the pen-shaped operating section (31) caused by the fingers of the operator's hand are transmitted as the rotation and movement of the needle-holder in optimum proportions through a computing section. Therefore, when the needle-holder is to be finely moved, a subtle motion of the fingers of the hand can be satisfactorily transmitted. Thereby, it is possible to provide a surgical operation device capable of doing minute surgical operations with ease.